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Introduction

1.1 Introduction

Having recently purchased three waterfront properties, James City County (JCC) identified a need for a Master Plan to guide the orderly use and development of all three sites: the Jamestown Beach Campground (JBC), Jamestown Yacht Basin (JYB), and the Chickahominy Riverfront Park (CRP). As a result, JCC issued a Request For Proposal (RFP #08-0024) titled “*Master Plan for Jamestown Beach Campground, Jamestown Yacht Basin & Chickahominy Riverfront Park*” dated October 9, 2007 for the development of conceptual master plans for each of the three sites. The concept plans are to address the long-range physical development, use, and stewardship of the sites over the next twenty years. The plans present a vision for the physical environment that promotes and supports the values and goals of James City County citizens. See Figure 1-1 for location of the sites.

Vanasse Hangen Brustlin, Inc. (VHB) was retained to provide master planning, survey and environmental services to James City County. VHB services included a review of JCC provided documents and studies relevant to the sites, field reconnaissance followed by development of site maps depicting development opportunities and constraints, assistance with, and participation in, public meetings, work sessions and a planning charrette leading to the development of preliminary site program alternatives and ultimately to the development of a final concept master plan. The following consultants assisted VHB in this effort as members of the master planning team:

- Guernsey Tingle Architects (GTA)
- Land Planning and Design Associates (LPDA)
- RKG Associates, Inc. (RKG)
- PROS Consulting, LLC (PROS)
- CIRCA~ Cultural Resource Management, LLC (CIRCA)



The VHB team began the master planning of the parks for James City County in January 2008. The Scope of Work for the planning effort includes the following general tasks:

- Data Gathering
- Meetings, work sessions and planning charrette
- Market Feasibility Analysis
- Master Planning of the three sites

This master plan report summarizes the information gathered during the preliminary evaluation and planning of the project and documents the steps taken and decisions made during the project. In order to understand the focus of the planning and design efforts, a clear understanding of the James City County goals and objectives is needed. A review of James City County's needs and objectives, as understood, follows.

1.1.1 James City County Signature Park

A Signature Park is one that projects an image of a community and what it represents; it is a park for which the community is known and serves as a local and regional draw for the community. The park offers a full complement of active and passive recreation opportunities, structured programs, and self-directed activities, as well as festivals and events for all ages. Examples of very well known Signature Parks in large systems include Central Park in New York City, Millennium Park in Chicago and Piedmont Park in Atlanta.



For James City County, a Signature Park would reflect the local landscape that citizens and visitors value and one that demonstrates the exceptional quality of life and the sense of history in James City County. This park would be in excellent condition and very well maintained. Park staffing and security would be optimum to ensure a quality experience for visitors. It is important to operate the park in a business-like manner with processes and procedures to ensure proper handling of all business activities while providing excellent customer service.



This park would provide residents and visitors to James City County an opportunity to learn from active programming, wayside interpretive signage, and appropriate printed materials focused on the amenities and services provided. The park provides core programs aligned with the natural and cultural features unique to the site that energize visitors and help them develop outdoor skills that are necessary to enjoy a variety of park activities such as overnight camping. A Signature Park inspires residents and out-of-county visitors to return home and tell others about their experience. When a Signature Park is achieved, it would provide a very significant economic benefit to the local economy. Signature Parks are managed by standards and outcomes that support the community's vision and values.


Potential components of the Signature Park could include:

- Community Recreation Center (teen activities, older adult center, theatre, gymnasiums, and various community programs)



- 1** Jamestown Beach Campground - 90.3 Acres
- 2** Jamestown Yacht Basin - 2A - 34.2 Acres
2B - 58.3 Acres Natural Area
- 3** Chickahominy Riverfront Park - 138.6 Acres
-  Virginia Capital Bike Trail

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Master Plan

for Jamestown Beach Campground, Jamestown Yacht Basin & Chickahominy Riverfront Park

Figure 1-1
Project Location Map

- Festival area
- Variety of outdoor amenities
- Art in the park
- Nature trails
- Ball fields

The JCC Parks and Recreation Master Plan Update recommends enhancing Chickahominy Riverfront Park and JBC as potential Signature Parks with the type of amenities and unique offerings that could attract a wide population segment. The outcome of the Shaping Our Shores planning process suggests that the most viable property for a signature park appears to be JBC.

Per the Parks and Recreation Master Plan update, Signature Park development must be done in a fiscally sound manner to encourage self-sustainability where appropriate to offset operational costs. Developing JBC as a Signature Park would promote the Parks and Recreation Division's strategy to upgrade existing parks to signature facilities to enhance use and appreciation of the value of the resource.

1.1.2 Jamestown Beach Campground Needs Assessment

Working in partnership with The Trust for Public Land, JCC purchased the JBC and JYB in December 2006 for permanent protection and public recreation. The 198 acres along the James River and Powhatan Creek are adjacent to Historic Jamestowne and Jamestown Settlement historic sites and the Colonial National Historical Park. The purchase of the properties was partially funded by various grants (discussed below). As a result, portions of the properties are subject to conservation covenants that impact future use and development. Any viable future use must give careful consideration to both the legally required and publicly expected conservation efforts for the properties.



Existing View of River from Vermillion House (JBC)

Prior to JCC acquiring JBC, it was a public campground with tent and trailer camping. Most of the infrastructure dates from the 1960's to 1970's with the exception of the original "Vermillion House" (c. 1830) and related outbuildings and gardens. The JBC site is approximately 91 acres in size located adjacent to the Jamestown-Scotland Ferry in Jamestown, which is approximately four



miles south of Williamsburg. The property is bounded to the north by 4-H Club Road, to the east by Greensprings Road (Route 614), to the south by Jamestown Road (Route 31), and to the west by the James River. The property was once part of a family estate converted to a private campground that included an existing two-story, historic residence and several outbuildings.

The primary needs of JCC as understood through the planning process and the objectives of the planning effort for JBC can be summarized as:

1. Develop a “Signature Park” for James City County;
2. Maintain large open green spaces;
3. Protect environmental and cultural resources and take advantage of interpretive opportunities, and
4. Provide for public access to the beach and other recreational park amenities.

1.1.3 Jamestown Yacht Basin Needs Assessment

JYB was opened in the late 1960’s and continues to operate as a 98-slip marina under a short-term lease with a private vendor. The marina portion of the JYB property that is under planning consideration comprises approximately 24 acres located on the south side of Jamestown Road across from the JBC property. The JYB site is bounded to the north by a Jamestown-Yorktown Foundation parcel on Jamestown Road (Route 31) that was recently acquired from JCC, to the east by private property and Powhatan Creek, to the south by the Colonial National Historic Parkway and to the west by Route 359. The marina basin is a man-made feature with access to Powhatan Creek. The property currently contains a full-service marina with a marina office building, boat sales and service shop, wet slips, boat ramp and trailer parking.



Existing View of Marina (JYB)

The primary needs of JCC as understood through the planning process and the objectives of the planning effort for JYB can be summarized as:

1. Redevelop the existing marina facility up to current marina standards and expectations;
2. Provide a mix of development uses with the potential to generate revenue sufficient for a self-sustaining site;

3. Protect environmental and cultural resources and take advantage of interpretive opportunities, and
4. Provide for public access to portions of the site for active and passive recreational activities including kayaking and canoeing.

1.1.4 Chickahominy Riverfront Park Needs Assessment

In 2001 JCC purchased CRP, located on John Tyler Highway (Route 5) at the confluence of the Chickahominy River and Gordon Creek. The 140 acre site includes two outdoor swimming pools, a boat ramp, a fishing pier, approximately 173 trailer and tent camping sites, a small golf driving range, two pavilions, a small store and access to the Virginia Capital Trail for walking and biking. The property has operated as a campground since the late 1960's. The CRP site is bounded to the north by Gordon Creek, to the east by a private property, to the south by the John Tyler Memorial Highway, and to the west by the Chickahominy River.



Open Space (CRP)

The property is currently an active James City County park with facilities for camping, boating/fishing, picnicking, and a seasonal pool, playground and rowing facility. Most of the site is comprised of open fields with mature woods found along the waterfront. The primary needs of JCC as understood through the planning process and the objectives of the planning effort for CRP can be summarized as:

1. Redevelop and renovate the existing campground facilities;
2. Expand the water activity uses with the addition of boat docks, organized boat ramp parking, an improved rowing facility and kayak/canoe launch sites and improve buffers, shorelines and beach areas for improved access to the water;
3. Protect the open green spaces and the environmental and cultural resources, and



4. Provide for the continuing accommodation of the county fair and other large events and for public access to the park for active and passive recreational activities.

1.2 Grant Funding Sources

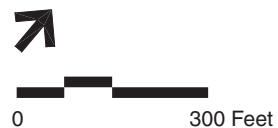
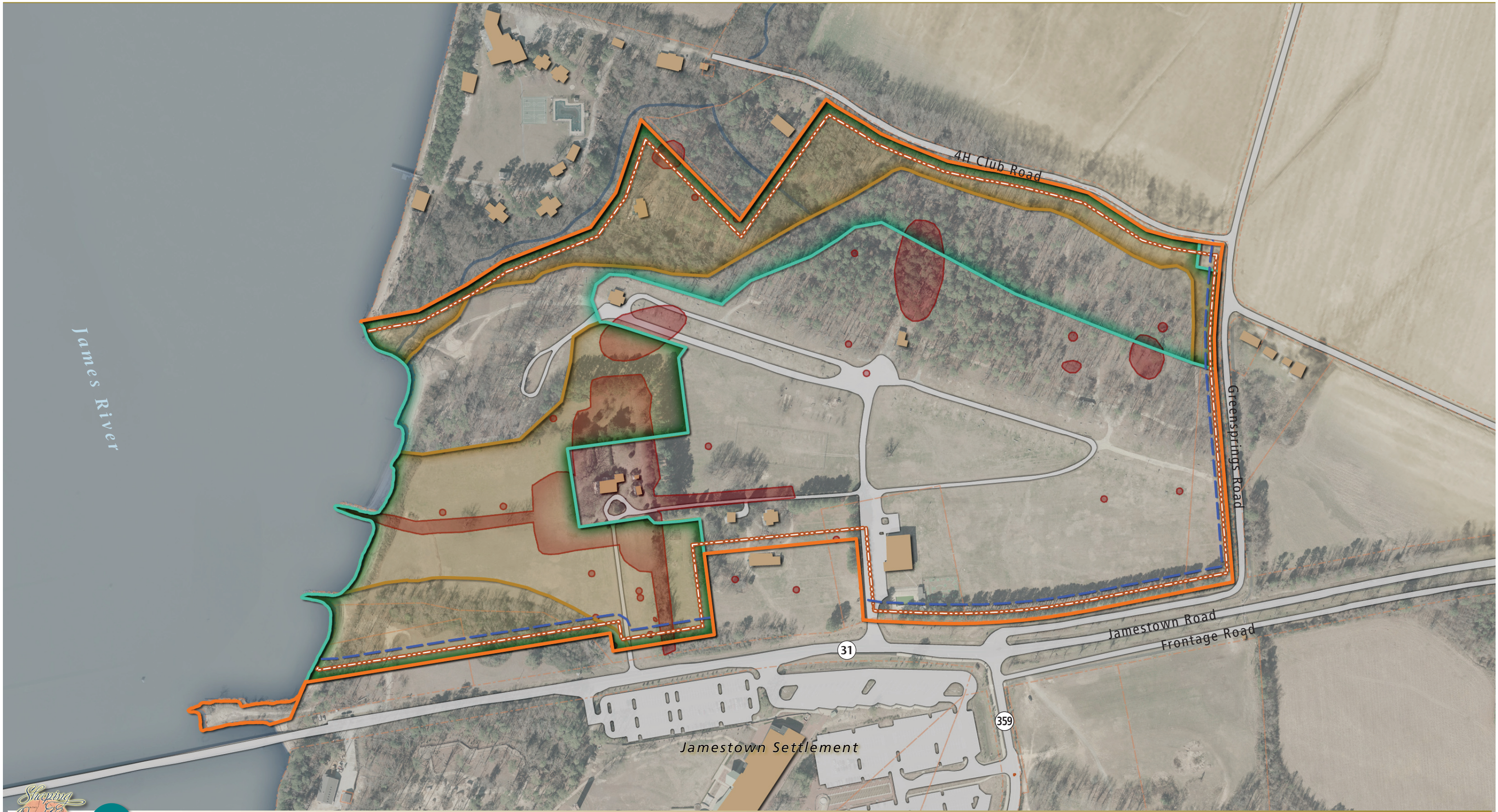
Several funding sources made the acquisition of the three sites possible for JCC. Some of the funding for JBC and JYB came from grant sources that include limitations on the future use of portions of the two properties. The limitations helped guide the planning for the sites, especially for the JBC. The grant funding sources that affect the planning of the properties are:

- National Oceanic and Atmospheric Administration (NOAA) Coastal and Estuarine Land Conservation Program (CELCP) Federal Grant
- Virginia Land Conservation Foundation (VLCF) Grant

Both the NOAA CELCP and the VLCF grant funding impose strict limitations as to the type of development that is allowed within the grant boundary areas (See Figures 1-2 and 1-3 for grant areas). As can be seen in the figures, the CELCP grant area is contained within the VLCF area.

The purpose of the grant funding was to ensure that the portions of the site contained within the grant areas remain in conservation-oriented uses. Specific allowed uses per the CELCP grant funding that affected the planning of the JBC site are as follows:

- Maintaining and enhancing the beach for public use (high priority)
- Allowed uses include swimming, sunbathing, canoeing, kayaking, fishing, hiking, and picnicing
- Parking areas (if feasible, stabilized with grass pavers)
- Permanent bathroom facilities and small lifeguard facility/stand
- Appropriate environmental restoration projects along the shoreline and ravine
- Habitat restorations and maintaining existing gardens and landscaped areas
- Preservation of campsites (25 campsites noted)
- Interpretation of the Battle of Greensprings with trails and markers

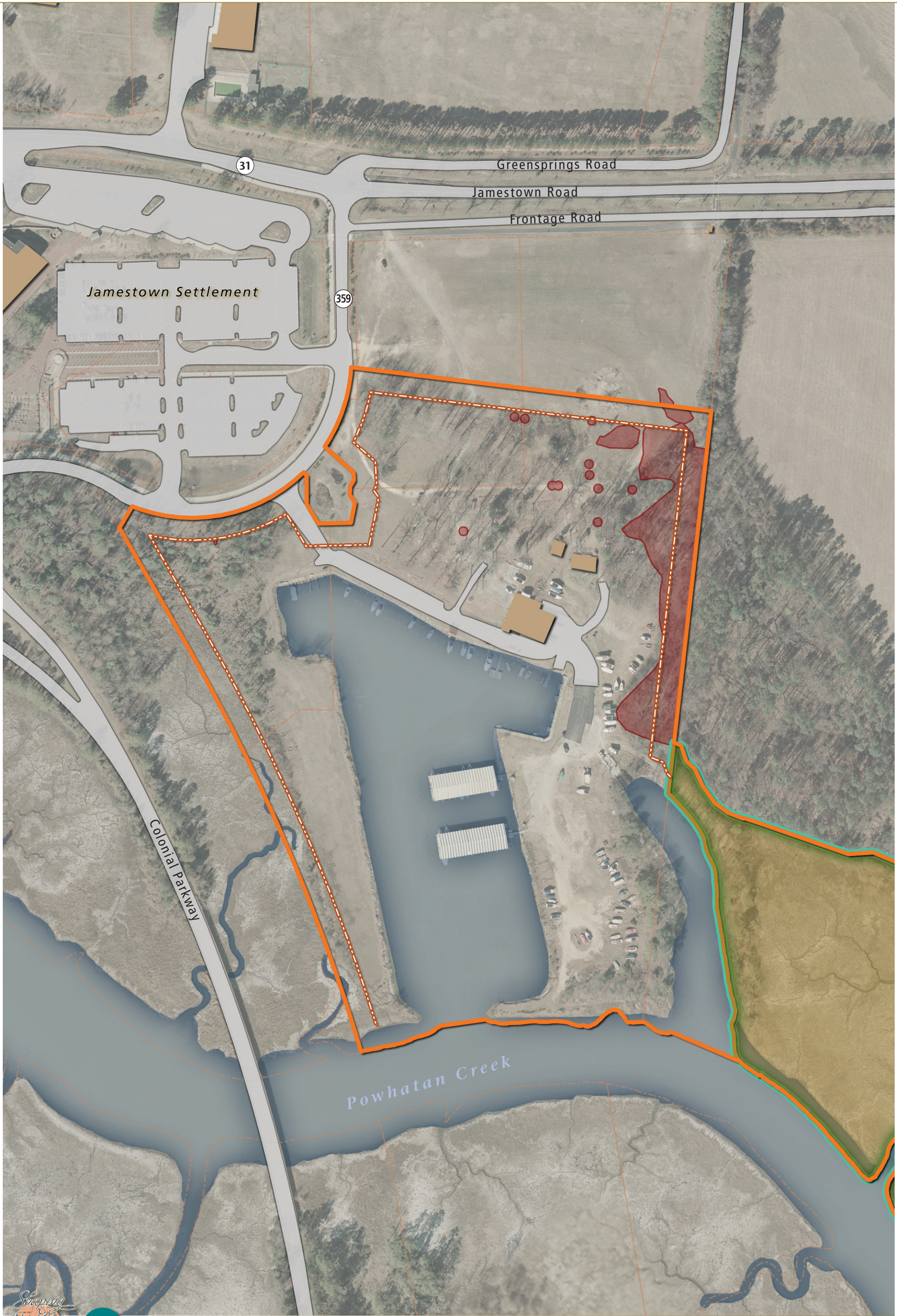


- Project Site Boundary
- Parcels
- Setbacks
- Community Character Corridor
- VLCF Grant
- CELCP Grant
- Archaeological Areas

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Master Plan for Jamestown Beach Campground, Jamestown Yacht Basin & Chickahominy Riverfront Park

Figure 1-2
Constraints Map: Grant Areas, Setbacks & Archaeological Areas
 Jamestown Beach Campground



- Project Site Boundary
- Parcels
- Setbacks
- VLCF Grant
- CELCP Grant
- Archaeological Areas

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Master Plan

for Jamestown Beach Campground, Jamestown Yacht Basin & Chickahominy Riverfront Park

Figure 1-3
Constraints Map: Grant Areas, Setbacks & Archaeological Areas
Jamestown Beach Campground

At the JYB property, only the tidal marsh area up to and including a portion of the cove is included in the grant area, therefore there was not a significant constraint imposed upon planning of this site. The planning of the property only took into account the marina portion of the site.

Refer to Appendix A for the “*ADDENDUM TO THE 2006 CELCP SUBMISSION FOR Jamestown Campground and Yacht Basin October 2006*” for further information and documentation as to uses allowed in the grant areas and a full description of the areas on the two the sites.

1.3 Evaluation Process

The project was broken down into key tasks to be accomplished through a systematic evaluation and planning process as outlined below:

1.3.1 Data Gathering

The initial task for the project consisted of gathering relevant data from JCC and other sources. The VHB team also met with JCC staff prior to commencing work on the master plan to kick-off the project and obtain documents and data for review. This allowed the VHB team to gain a better understanding of the sites and planning issues early in the process and to also become familiar with JCC resources.

The following list of resources helped establish a research context, both for the sites and for the market analysis discussed below:

- Real Property Appraisal of JBC and JYB
- Phase I Archeological Assessments of JBC, JYB and CRP
- Phase I Environmental Site Assessments of JBC, JYB and CRP
- 2003 James City County Comprehensive Plan and 2008 Update Information
- James City County Strategic Management Plan
- 2008 and 2003 Parks and Recreation Comprehensive Master Plan Draft
- Powhatan Creek Watershed Management Plan and supplemental reports February 2002 and revisions dated October 2006
- Special Stormwater Criteria as approved December 2004 for Powhatan Creek watershed
- Gordon Creek Watershed Management Plan and Gordon Creek Findings Report
- Zoning and County Ordinances
- Boundary surveys for JBC and JYB in hardcopy
- JCSA Utility maps and plans for water and sanitary systems
- Parks and Recreation Master Plan Update Input Survey



- GIS mapping information
- Most Current Aerial photographs in standard digital formats
- Property inventory information, as compiled for insurability purposes
- Parcel and property ownership GIS maps and property assessment data
- Existing and proposed roads and roadway improvements
- Economic and demographic data (latest population estimate)

1.3.2 Field Survey

Topographic surveys including ground control of the sites were deferred to future phases of planning for the properties. The VHB Team relied on GIS mapping and data provided by JCC. This information was often insufficient for detailed planning (i.e. 5' contour intervals over relatively flat sites, schematic utility drawings not to scale and not surveyed, etc.); therefore planning base maps generated are not to be construed as field survey information suitable for design development.

The GIS information was supplemented in some areas of the sites where field survey data was needed to confirm wetland boundaries, shorelines and stream features, and water depths in the yacht basin.

1.3.3 Facility and Infrastructure Assessment

The consulting team performed a limited visual inspection of on-site existing facilities and infrastructure and assessed the functionality and life expectancy of physical elements such as parking, access roads, stormwater systems, water and sewer. Limited assessments of only those buildings that may have reuse potential were considered. They included the store building at JBC, the main buildings at the JYB and the pool and related buildings at CRP. The assessment addressed whether site features could be reused or renovated or whether they should be recommended for demolition.

1.3.4 Environmental and Natural Resource Evaluations

VHB performed stream determinations and confirmed Resource Protection Areas (RPA) for JBC, JYB and CRP.

In addition, VHB delineated wetlands in accordance with the U.S. Army Corps of Engineers (COE) Manual for Delineation of Wetlands. The wetland boundaries were field surveyed and confirmed by the COE.

To address hazardous materials, VHB performed visual observations of existing infrastructure during site inspections. The visual inspections were limited to surface features on the sites with consideration given to prior uses, such as chemical storage, in order to identify locations that may contain potentially hazardous materials or related infrastructure, such as underground fuel tanks.

VHB performed a visual observation and assessment of existing James River shoreline at JBC and the Chickahominy River and Gordon Creek shorelines at CRP. A summary of the observations identifying the locations and issues associated with the shoreline that are relevant to the planning and proposed improvements for beach/shoreline restoration and bank stabilization are provided later in the report. Consideration is also given to permitting issues that may be associated with the proposed improvements.

1.3.5 Cultural Resource Document Review

VHB's subconsultant, CIRCA, reviewed Phase I Archaeological Assessment documents that were provided by JCC for the three sites for the purpose of understanding the cultural resource significance of the sites and potential constraints to future development of the sites. The report reviewed for JBC and JYB, *Phase I Cultural Resources Survey of the James City County Campground and Yacht Basin Marina, James City County, Virginia*, dated June 2008 was prepared by Archaeological & Cultural Solutions, Inc. (ACS).

For CRP, the report by Geo-Marine, Inc. (GMI) titled, "*PHASE I CULTURAL RESOURCES SURVEY AND ARCHAEOLOGICAL INVENTORY OF THE CHICKAHOMINY RIVERFRONT PARK JAMES CITY COUNTY, VIRGINIA*" dated December 2007 was reviewed.

1.3.6 Environmental Constraints

VHB prepared environmental constraints maps (See Figures 1-2 to 1-7) to serve as the basis for subsequent master planning. The maps depict available site information along with field studies and observations made during the study. The data was overlaid on the GIS base map showing the constraints imposed by existing site conditions.

The narrative that follows provides a brief overview of the rules/regulations and the agencies that have jurisdiction over the various environmentally sensitive areas on the properties. Detailed descriptions of the natural resources found on the properties are provided in subsequent chapters of this report.

1.3.6.1 Jurisdiction of Wetlands and Surface Waters

Overview of Surface Waters and Wetlands Protection

Federal Jurisdiction

U.S. Army Corps of Engineers - Section 404 Clean Water Act

The Environmental Protection Agency and the United States Army Corps of Engineers regulate all "waters of the U.S." which include all waters subject to the ebb and flow of the tide; interstate waters; intrastate waters such as lakes, rivers, and streams; impoundments; tributaries; and wetlands adjacent to waters. Wetlands are defined as "areas that are inundated or saturated by



surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soils conditions” (COE/DOA 1987). Determination of a jurisdictional wetland requires the presence of three parameters: hydric soils, a dominance of hydrophytic vegetation, and wetland hydrology. This determination is tied to Section 404 of the Clean Water Act, which provides for the protection of “waters of the United States,” including wetlands, and instructs the COE to issue permits for activities that result in the discharge of dredged or fill material into these areas.

a) U.S. Army Corps of Engineers - Section 10 Rivers and Harbors Act

Section 10 of the Rivers and Harbors Act of 1899 prohibits the obstruction, building upon, excavation, fill, or altering of the course, location or capacity of any navigable water unless the work has been affirmatively authorized by Congress or has been recommended by the Chief of Engineers and authorized by the Secretary of War. Typically, work conducted within, on, or above Section 10 waters requires authorization by the Department of the Army, and often one permit issued by the Department of the Army may jointly serve to authorize work pursuant to Section 404 of the Clean Water Act and Section 10 of the Rivers and Harbors Act.

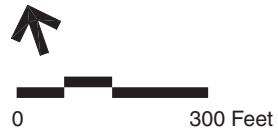
Commonwealth of Virginia Jurisdiction

a) Virginia Department of Environmental Quality - Virginia Water Protection Permit (VWPP)

The Commonwealth of Virginia has enacted laws for the protection of all “state waters” defined as “all water, on the surface and under the ground, wholly or partially within or bordering the Commonwealth or within its jurisdiction, including wetlands.” The federal definition of wetlands is reciprocated by the Commonwealth. The Virginia Department of Environmental Quality (DEQ) has been delegated the authority to issue permits for work involving the dredging, filling, and/or significant alteration of wetlands through the Virginia Water Protection Permit (VWPP) program.

Virginia Marine Resources Commission (VMRC)

The VMRC has been given the authority to regulate all “Waters of the Commonwealth” defined as “a) any stream or that portion of any stream in the Commonwealth which prior to June 21, 1932, has been declared navigable by any un repealed statute of this Commonwealth, or b) any stream or that portion of any stream in this Commonwealth, the bed of which is owned by the Commonwealth, or c) those parts of streams or other bodies of water in this Commonwealth which either in their natural or improved condition, notwithstanding interruptions between the navigable parts of such streams or waters by fall, shallows, or rapids, compelling land carriage, are used or suitable for use for the transportation of persons or property in interstate or foreign commerce, including therein all such interrupting falls, shallows or rapids, and also any stream or part thereof in this Commonwealth other than those above mentioned in this subdivision in which the construction of any dam or works as authorized by this chapter would affect the interests of interstate or foreign commerce, or d) that portion of any river or stream flowing between the high-water mark on the Virginia shore and the low-water mark

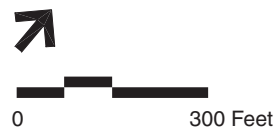


- Project Site Boundary
- Parcels
- Setbacks
- Community Character Corridor
- Archaeological Areas

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Master Plan for Jamestown Beach Campground, Jamestown Yacht Basin & Chickahominy Riverfront Park

Figure 1-4
Constraints Map: Setbacks & Archaeological Areas
 Chickahominy Riverfront Park

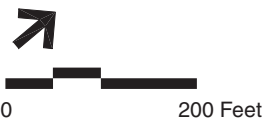


- Project Site Boundary
- Parcels
- Flood Plain
- Wetlands
- Resource Protection Area (RPA)

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Master Plan for Jamestown Beach Campground, Jamestown Yacht Basin & Chickahominy Riverfront Park

Figure 1-5
**Constraints Map: Resource Protection Area,
 Wetlands & Flood Plains**
 Jamestown Beach Campground



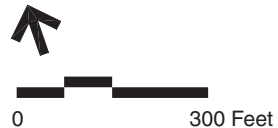
- Project Site Boundary
- Flood Plain
- Wetlands
- Resource Protection Area (RPA)

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for Jamestown Beach Campground, Jamestown Yacht Basin & Chickahominy Riverfront Park

Figure 1-6
**Constraints Map: Resource Protection Area,
Wetlands & Flood Plains**
Jamestown Yacht Basin



- Project Site Boundary
- Parcels
- Flood Plain
- Wetlands
- Resource Protection Area (RPA)

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Master Plan for Jamestown Beach Campground, Jamestown Yacht Basin & Chickahominy Riverfront Park

Figure 1-7
**Constraints Map: Resource Protection Area,
 Wetlands & Flood Plains**
 Chickahominy Riverfront Park

- b) when such low-water mark constitutes the boundary line between Virginia and another state.” Such authorization by the VMRC for work in Waters of the Commonwealth are through the issuance of a permit to perform work within or over subaqueous bottoms.

Furthermore, VMRC rules prohibit any person to build, dump, trespass or encroach upon or over, or take or use any materials from the beds of the bays, ocean, rivers, streams, or creeks which are the property of the Commonwealth, unless such act is performed pursuant to a permit issued by the Commission or is necessary for the construction of piers, docks, marine terminals, and port facilities owned or leased by or to the Commonwealth or any of its political subdivisions, as well as other uses specified in 28.2-1203.

James City County Wetlands Board Jurisdiction

The James City County Wetlands Board maintains jurisdiction over all vegetated tidal wetlands that lie between and contiguous to mean low water and an elevation above mean low water equal to the factor 1.5 times the mean tide range. The list of vegetation necessary to qualify as a tidal wetland is listed in Chapter 22 of the County Code. The county wetland ordinance allows work in wetlands when the work is associated with any “governmental activity in wetlands owned or leased by the Commonwealth of Virginia or a political subdivision thereof.” Permits from other regulatory agencies, however, would still be required.

Wetland Permitting Requirements

Work within the Powhatan Creek, James River, Chickahominy River and wetlands would require some form of regulatory approval. For non-tidal wetland impacts, these approvals are received from the U.S. Army Corps of Engineers and the Virginia Department of Environmental Quality. While these same agencies regulate tidal systems, impacts to tidal wetlands would also require authorization from the James City County Wetlands Board, and activities below mean low water (submerged bottomlands) would require a permit from the Virginia Marine Resources Commission. A summary of jurisdictional responsibilities is provided below.

Agency	Jurisdictional Lands	Responsible Jurisdiction
U. S. Army Corps of Engineers	All tidal and non-tidal waters of the United States	Issuance of General (GP) or Individual Permit (IP)
Virginia Department of Environmental Quality	All tidal and non-tidal waters of Virginia	Issuance of Virginia Water Protection Permit (IP)
Virginia Marine Resources Commission	State submerged bottomlands (land below the mean low tide elevation).	Issuance of permits for activities below mean low water
James City County Wetlands Board	Tidal wetlands	Issuance of permits to tidal wetlands
U.S. Fish and Wildlife Service		Commenting Agency. Overseer of any federally listed threatened/endangered species impacts



Agency	Jurisdictional Lands	Responsible Jurisdiction
Virginia Department of Game and Inland Fisheries		Commenting Agency. Overseer of state listed threatened/endangered species impacts
Virginia Department of Historical Resources		Commenting Agency regarding archaeological and historical resources
* NOTE: General Permits (GP) have been developed for projects with minimal wetland impacts and have shorter processing times. Individual Permits (IP) require a 30 day public notice as part of the review process.		

1.3.6.2 James City County Chesapeake Bay Preservation Ordinance

The James City County Environmental Division is responsible for implementing and enforcing the Chesapeake Bay Preservation Ordinance designed to protect surface water courses leading to the Chesapeake Bay in accordance with State regulations contained within 9VAC 10-20-10 et seq. Section 23-3 of the County Ordinance describes the various Chesapeake Bay Protection Areas (CBPAs) and how they are designated. Of particular importance are Resource Protection Areas (RPAs), which include:

- Tidal wetlands (defined by Chapter 22 of the County Code);
- Non-tidal wetlands connected by surface flow and contiguous to tidal wetlands or water bodies with perennial flow;
- Tidal shores;
- A buffer area not less than 100 feet in width located adjacent to and landward of the components listed above, and along both sides of any water body with perennial flow.

Clarification of long-standing vagaries with regard to determining surface flow connectivity and wetland/stream contiguity were addressed by the Virginia Department of Conservation and Recreation (DCR) "Chesapeake Bay Local Assistance Division" (CBLAD) in their guidance document entitled Resource Protection Areas: Nontidal Wetlands, adopted June 18, 2007 and revised December 10, 2007.

Work within the Resource Protection Area (RPA) would be regulated by the County Environmental Division. Development in RPAs may be allowed only when permitted and if it (i) is water dependent; (ii) constitutes redevelopment; (iii) is a new use subject to the provisions of subsection (c)(2) of the Ordinance; (iv) is a road or driveway crossing satisfying the conditions set forth in subdivision (3) of the ordinance; or (v) is a flood control or stormwater management facility satisfying the conditions set forth in subdivision (4) of the ordinance. For work within the RPA, a Water Quality Impact Analysis (WQIA) may be required depending on the extent of the disturbance, and an application must be submitted to the Environmental Division requesting a permit to perform the activity. Some activities determined to have minimal impacts to water quality (such clearing for a foot path) may be exempt from the Ordinance. A formal request must be made to the Environmental Division when seeking an exemption.

1.3.6.3 Cultural Resources

Pursuant to 36 CFR Part 800, *Protection of Historic Properties*, regulations implementing Section 106 of the National Historic Preservation Act of 1966, as amended, 16 U.S.C. 470f, and 33 CFR Part 325, *Appendix C, Processing of Department of the Army Permits: Procedures for Protection of Historic Places*, the U.S. Army Corps of Engineers (Corps) is required to take into account the effects of federally permitted undertakings on properties included in or eligible for inclusion in the National Register of Historic Places prior to the issuance of permits for the undertaking and to consult with the State Historic Preservation Officer (SHPO).

In addition, James City County as part of their rezoning process requires an archaeological proffer to be developed over the property. This proffer mimics the Corps requirement and serves as the basis for satisfying the requirements of Section 106, providing a framework for the identification, evaluation, and mitigation of adverse effects to all significant historic properties that would be impacted by the proposed undertaking.

Phase I identification surveys would be conducted within those areas identified as being within the area of potential effect (APE). Copies of all Phase I identification surveys for historic properties would be submitted to the County and SHPO for review and comment. If the SHPO, in consultation with the Corps, determines further investigation is required to determine whether identified historic properties may be eligible for the National Register, the Applicant shall undertake, in consultation with the SHPO, further investigation of sufficient intensity to make such determination. Archaeological investigations would take into account the views, if any, of Native Americans who have knowledge of or a cultural affiliation with the study area.

The Corps, in consultation with the SHPO, would apply the criteria (36 CFR Part 63) for listing in the National Register to previously identified historic properties, taking into account the views, if any, of the interested public or Native Americans regarding the significance of the properties being evaluated.

Phase I identification and Phase II evaluation studies and documentation shall meet the federal standards entitled *Archaeology and Historic Preservation: Secretary of the Interior's Standards and Guidelines* (48 FR 44716-44742, September 29, 1983) and the SHPO's *Guidelines for Preparing Identification and Evaluation Reports for Submission Pursuant to Sections 106 and 110, National Historic Preservation Act, Environmental Impact Reports of State Agencies, Virginia Appropriations Act, 1992 Session Amendments* (June 1992). Reports would be prepared and submitted to the SHPO for review and comment. The SHPO would have 30 days, from the date of receipt, to provide comments on Phase I identification and Phase II evaluation studies and documentation submitted pursuant to this part. If the SHPO does not respond within 30 days of receipt, then concurrence can be assumed.

For those historic properties, which the Corps and the SHPO agree are not eligible for the National Register, no further investigation would be required. For those historic properties included, or determined eligible for inclusion in the National Register, the Applicant shall proceed in accordance with the stipulations of their agreements.



1.3.6.4 Listed Species Protection

U.S. Fish and Wildlife Service (USFWS)

The USFWS oversees the implementation of the federal Endangered Species Act of 1973 protecting plants and animals listed as threatened or endangered. Section 7 of the Endangered Species Act requires federal agencies to insure that any action authorized, funded or carried out by them is not likely to jeopardize the continued existence of listed species or modify their critical habitat. Section 10 prohibits the unauthorized taking, possession, sale, and transport of endangered species.

Virginia Department of Game and Inland Fisheries (VDGIF)

The VDGIF is authorized to enforce the protection of state listed wildlife species pursuant to Title 29.1, Chapter 5. Work that would result in the “taking” of a listed species incidental to construction activities must first be permitted by the VDGIF.

Virginia Department of Conservation and Recreation

In 1979, the Endangered Plant and Insect Species Act mandated that the Virginia Department of Agriculture and Consumer Services conserve, protect, and manage endangered and threatened species of plants and insects. Chapter 39 of the Virginia Statutes section 3.1 states, “It shall be unlawful for any person to dig, take, cut, process, or otherwise collect, remove, transport, possess, sell, offer for sale, or give away any species native to or occurring in the wild in Virginia that are listed in this chapter or rules and regulations promulgated pursuant thereto as threatened or endangered, other than from such person's own land, except in accordance with this chapter or the rules and regulations adopted pursuant to this chapter by the Board.” State and local wetland permitting agencies may regulate the protection of state listed plants as part of the wetland permitting process.

1.3.7 Meetings, Work Sessions and Charrette

To solicit input from a broad array of interests, the VHB team conducted meetings with Board of Supervisors (BOS) members, JCC staff, project stakeholders, and the general public. The team also conducted a day-long planning charrette with JCC staff and project stakeholders. (See Appendix B for Meeting Notes and Attendee lists)

Two members of the VHB team met independently with each BOS member over the course of a few weeks for the purpose of briefing them on the scope and progress of the project and obtaining individual feedback from each member.

VHB conducted a full day work session meeting with various JCC departments. The purpose of the meeting was to obtain additional information from JCC as needed based on the initial document reviews, to discuss specific site and planning issues and to begin formulating potential alternatives for the sites. This session considered in detail the information obtained during the initial kick-off/ work session meeting noted above. During this meeting, key members of the VHB market analysis team met with JCC staff and other interested parties to discuss and define the full parameters and objectives of the project before the market analysis began.

VHB conducted a stakeholder meeting with JCC staff and the following primary project stakeholders:

- National Park Service (NPS)
- Association for the Preservation of Virginia Antiquities (APVA)
- Virginia Department of Transportation (VDOT)
- 4-H Club
- Economic Development Authority (EDA)
- Jamestown-Yorktown Foundation (invited, but did not attend)



Public Meeting

VHB assisted JCC in presenting the project and the known issues as understood to date and facilitated discussions relevant to each stakeholder.

VHB assisted JCC in conducting a citizen forum and public input meeting. During this meeting, VHB presented the project and the known issues related to the sites and opened up the meeting to public comment and discussion related to site issues, community concerns and potential uses. Participants listed the strengths, weaknesses, opportunities and threats for each of the three sites.

The meeting involved an initial “visioning session” taking into account the “long horizon” for the sites and for establishing project goals, principles, policies, and initiatives in preparation for the subsequent planning charrette. The purpose of the visioning session was to create a set of shared values, principles, and vision statements prior the charrette. Information obtained from citizens during this meeting provided the basis for formulating an outline of master planning objectives and program elements to be considered during future master planning tasks. In addition, JCC obtained electronic feed-back from meeting participants and other citizens and provided a summary of the feedback to the consulting team.



In the case of the JBC property, the public participation during the planning process revealed some private groups having an interest in the partial use of the property which resulted in specific proposals being received by JCC. These proposals are briefly discussed within this report, however specifically determining the exact fate of a JCC facility, such as the Vermillion House (i.e. exactly what type of office or exhibits that would be housed there or which group would be granted a lease) or identifying what groups should control the day-to-day operations of any of these sites is beyond the scope of this master plan. These decisions would be made by James City County in the future based on input from the County's elected and appointed officials.

VHB conducted a planning charrette with JCC staff and other stakeholders that incorporated a brief visioning session that built upon prior visioning work accomplished in previous tasks. The purpose of the charrette was to receive input from participants, combine it with information previously obtained and begin creating site alternatives and options for uses and improvements at a conceptual level. Several concept sketches were developed and various alternatives explored from which the initial master planning began. The charrette is discussed in more detail in the Master Planning section below.

The concept sketches with a "more" or "less" option for each site were presented to the general public at the second meeting held in May 28, 2008. Audience members offered comments on each option.

1.3.8 Market Feasibility Analysis

The Market Feasibility Analysis effort was led by VHB Team member RKG Associates, Inc. This effort consisted of a series of tasks designed to identify the economic trends and evaluate the major business factors that are shaping and influencing James City County and the region, and how these factors would affect the development potential of the three sites. From these trends, a series of financial pro-forma projections were made for the immediate to five-year, ten-year and twenty-year periods for the identified master plan program elements.

The market area analysis, in part, took into consideration regional context. Although this effort was to determine the market feasibility of the three sites and potential uses, it was necessary to analyze trends in the area surrounding James City County in certain cases to better understand primary market forces. The consultants worked closely with JCC staff to define the competitive market area for potential uses for the sites.

The results of this task provide a clear picture of recent land absorption, building development, leasing trends, and real estate pricing indicators. From this historical data, the project team forecasted the demand for various uses and services by different types of end users.

Utilizing data collected by the VHB team pertaining to construction, operation and maintenance of the final uses proposed for each of the three sites, the team performed a pro-forma style analysis to serve as a cost/benefit analysis. Refer to the complete economic analysis report contained in Appendix N for a comprehensive overview of the market and proforma analysis.

Public Outreach Survey

The consultants performed a survey of targeted local and regional recipients within the primary market area to gauge interest and opinions on the current and potential camping and boating recreational uses located at each of the sites. The identified uses, which reflect a stated need by the community, were considered in the alternatives development for the master plan. The public outreach survey provided a “first-person” look at market demand for marina and campground uses. The team collected recent supply and demand data from various facilities with similar operations around the three sites. This effort showed historic trends in the market, whereas the survey provided the opportunity to communicate directly with current and potential users about their future needs and desires.

1.3.9 Master Planning

Parklands, in general, require multiple and unique considerations during a planning process some of which include:

Gateways: Opportunities exist to celebrate a recreation, historic and natural location by creation of orientation points into and throughout the park. These gateways may reinforce access, parking areas, and pedestrian connections into and from the various activity zones within a complex.

For example, Jamestown Road, at the intersection of Greensprings Road becomes a predominate “gateway” to the JBC and JYB parks and provides a gateway corridor to an area extremely rich in history, scenic vistas, and recreational and educational opportunities which in addition to the parks includes the Jamestown Settlement, Mainland Farm, the Colonial National Historic Parkway, historic Jamestown Island and its National Park Service (NPS) and Association for the Preservation of Virginia Antiquities (APVA) visitor and archeology facilities, 4-H Camp complex and the Jamestown-Scotland Ferry. This gateway concept creates a sense of arrival and would help the tourism community market these attractions.

Edges: Redefining the boundaries of a park is important to establishing a clear concept for spatial identity of the facility. The potential to reinforce the park edges along the road corridors would help identify the facility from the outside while screening activity areas from abutters and roadways and improving Community Character Corridors (CCC) where they exist. In addition, it is critical to provide direct public access to the waterfront and shoreline edges that provide such a variety of water-related recreational activities.

Open Space: Parks are defined and identified by their shape and the layout of roads, buildings, programs, walks and open space. Strengthening the clarity of the open space would help set program space amenities apart and give definition to each multiple event area and provide necessary landscape buffers between individual programs.

Pedestrian and Bicycle Links: Pedestrian and bicycle links between the community at large and internally are critical to the success of the park. Internal links would serve to form linear landscape connections between program and public access routes and adjacent neighborhoods. Connections to existing pedestrian/bicycle paths such as the Virginia Capital Trail are vital to the planning of these parks.



Recreational Facilities: Programming for multiple use and flexibility on a seasonal basis is critical to the long term success and maintenance of the parks. The flexibility to change and introduce new program characteristics is important to maintaining year-round active use of the parks and ongoing community vitality.

Safety and Security: Parks need to be designed to allow users to feel safe and secure at all times. Views into and from the core program areas are important in engaging park users and adjacent landowners to maintain an “eyes on” the park program. Lighting needs to be coordinated for program areas; as well as to create a distinct identity for the park without adverse impacts to adjacent neighbors and uses.

Sustainable Design and Maintenance:

All three sites present an opportunity for James City County to make significant environmental improvements from the present conditions by incorporating Leadership in Energy and Environmental Design (LEED) and sustainable development principles into concept planning and set an example for future development in the county as how to accomplish these environmental goals.

Green space and grant funds from conservation minded organizations that emphasize proper stewardship of our natural and cultural resources made the purchase of the JBC and JYB properties possible. Completion of archeological studies before site development and an inclusive master plan process that identifies the natural and cultural resources and outlines how they would be protected and interpreted as part of the future use of the sites are examples of James City County’s commitment to the long-term environmental stewardship of the properties.

The development of any new project must be responsive to the finite nature of our natural, cultural, environmental and energy resources. The master plan for the parks seeks opportunities to use recycled materials, energy efficient lighting, and xeriscape principles of landscape design. The primary long-term maintenance program is to present a healthy landscape that helps JCC deliver a program that is cost effective and environmentally sound.

The master planning process resulted in an overall concept plan for each of the three sites. The plans address the following key elements:

- Internal traffic circulation and ingress/egress access points
- Potential traffic impacts at the point of access
- Pedestrian / bicycle connections
- Utilities and infrastructure
- Land use, open space and landscape character
- Site development opportunities
- Water access and shoreline and buffer improvements

Subsequent chapters of this report describe these key elements of the plans and provide an estimate of the overall potential costs associated with the master plans.

Throughout the course of the planning process, VHB met on a regular basis with JCC staff to ensure timely sharing of information and planning options during the process and to receive constant feedback and direction as to the development of the plans and decisions made by JCC.

The master planning effort was limited in scope and budget and expressly did not include tasks for certain services and disciplines. Specific areas of work that were not performed by the consulting team include:

- Formal site, civil, drainage, structural or traffic engineering plans
- Traffic Impact Studies (i.e. traffic counts and analysis)
- Geotechnical testing and evaluation services
- Structural, mechanical, electrical and plumbing evaluations and engineering services
- Landscape design beyond a planning level
- Field surveys for threatened and endangered species or cultural resource studies

1.3.9.1 Planning Charrette

On May 7, 2008, James City County staff and VHB, along with GTA, LPDA, RKG, and PROS, conducted a day-long planning charrette. The charrette included two sessions– a morning and early afternoon session for senior staff from VDOT, the National Park Service, 4H Club and the Williamsburg Land Conservancy; and a late afternoon session for senior members of the County staff. The James City County Project Manager and the VHB Project Manager conducted the charrette to expand on the opportunities and suggestions mentioned during the initial citizen forum and public input meeting and to develop preliminary concept sketches of possible facilities and amenities for the three properties.

Over 30 participants attended all or portions of the charrette. The charrette schedule, charrette notes, and list of attendees are included in Appendix B, Planning Charrette. Key issues that were discussed during the charrette are included in the related sections of this report.



Master Planning Charrette

1.3.9.2 Master Plan Program Elements

Jamestown Beach Campground (JBC)

James City County has identified a need for a “signature park” as described above. The following list includes suggested program elements that could feasibly be included in a predominant



county park focused on providing a range of complimentary services and amenities to county residents. Although some elements may generate revenue, they would likely not be sufficient enough to make the park operations revenue neutral. The planning team received direction from JCC that the park planning was not to focus strictly on opportunities for revenue generation only. In the overall planning of the three sites, the other park properties may have greater revenue generating opportunities, which may help offset potential deficits at the Jamestown Beach Campground.

Table 1-1 Jamestown Beach Campground Master Plan Program Elements

Alternate 1	Alternate 2
Vermillion House Restored for events (Potentially for weddings/receptions/ catered parties, etc.). Possibly to include a JCC administration office/event planning office with parking (40 vehicles±)	Environmental Education type of venue: Vermillion House perhaps serving some functions for exhibits/ welcome center/ ticketing and office. Environmental park includes formal garden and open lawn riverfront area and parking.
Formal garden at Vermillion House, to include large trees and "Greate Road" interpretive feature	same
Open lawn at Vermillion House riverfront area and transition area from formal gardens	same
Rental cabins in existing camping area (located to facilitate possible partnership with 4-H Club)	same
Beach improvements/re-nourishment with breakwaters.	same
Beach access at north and south ends, restroom/concession building and limited parking (30 vehicles±). Children's playground area	same
Central main building/restrooms, administration and maintenance functions with associated/combined outdoor event stage and concession services. Parking nearby for typical general use (not event parking for event patrons).	same
Large open grass special event field with facilities for accommodating event needs.	same
Access to site from Jamestown Road (roundabout option) and internal access to JYF 3.0 acre parcel. Access management for internal circulation (gate house/information/ ticketing/point of sale, etc.)	Access to site from Jamestown Road (non-roundabout option) and internal access to JYF 3.0 acre parcel. Access management for internal circulation (gate house/information/ ticketing/point of sale, etc.)
Paved recreational bike/ped path around site and connected to Virginia Capital Trail on each side.	same
Virginia Capital Trail bike path trailhead (parking for 30 vehicles)	same
Outdoor recreation (challenge course/ropes course/environmental education area)	same

Jamestown Yacht Basin (JYB)

The goal for the planning of this site was to focus on maximizing marina and boating opportunities and to maximize potential revenue generation for JCC. In contrast to this program, an alternative concept sketch was created that depicts a vastly different approach to revitalizing the marina. The master plan version shows an aggressive plan from a land use point of view, whereas the alternative concept plan, provided in Appendix L, depicts a scaled-back version showing only marina related program elements with minimal environmental impacts. As discussed in the Executive Summary, the Board of Supervisors did not support residential or hospitality components as part of the JYB development. The results of the planning process for JYB produced the following master plan program elements as Alternate 1 and the marina related elements only as Alternate 2:

Table 1-2 Jamestown Yacht Basin Master Plan Program Elements

Alternate 1	Alternate 2 (Marina elements only)
New marina that maximizes number of slips, including floating docks, new bulkheads, fuel, sanitary pumpout and parking	same
Kayak/canoe launch at cove area with limited parking	same
New marina building with maintenance service and sales	same
Waterfront restaurants (2) with outdoor seating, ship's store and waterfront promenade	Waterfront restaurant (1) with outdoor seating, ship's store and minimal waterfront promenade with no vehicle parking within RPA
High density residential condominiums some above commercial /retail shops and boutiques	No condominiums or commercial/retail shops or boutiques
Dry stack boat storage	Dry stack boat storage and parking moved to upland area outside of RPA
Relocated boat ramp and parking	Relocated boat ramp to west corner of basin and reduce parking to a minimum
Pedestrian/bike connection to JBC and Jamestown Settlement and Virginia Capital Trail	same
Dedicated space for public safety/EMS vessel, tour boat operations and commercial fishing boats	same
New access to site and internal access to JYF 6.6 acre parcel.	same

Chickahominy Riverfront Park (CRP)

The plan for this site emphasizes water sports (sailing, boating, fishing, kayak/canoeing, rowing, etc.) and camping (tents, RV campers and motor homes, and cabins) to the extent feasible within the limits of well water and septic sanitary sewer systems. The plan maintains the existing large outdoor area for the County fair and other events and festivals. No improvements are proposed that would require the PSA to be extended and public water and sanitary service be installed to the property.



Table 1-3 Chickahominy Riverfront Park Master Plan Program Elements

Alternate 1	Alternate 2
Revitalize existing primitive tent sites and camping trailer (small to medium) sites (at least 20 full-service sites). Provide new central camp building, restroom/shower facilities and smaller satellite buildings with facilities (seasonal)	same
New RV facility for motor homes and large trailer (i.e. towed 5 th wheel campers)	same
New rental cabins	same
Large open grass event area and facilities and utilities to support events (i.e. county fair)	same
Fixed wood docks for sail boats, transient boaters and campground/boat ramp patrons	same
Casual seasonal food concession facility near docks	same
Organized parking for existing boat ramp	same
Kayak/canoe launch and rowing facility with boat house on Gordon Creek with parking.	Kayak/canoe launch and rowing facility on Gordon Creek with parking.
No seasonal storage facility	Fenced seasonal boat and trailer storage area
Maintain and improve existing pool and playground area	same
Community building with restrooms and meeting room for educational functions, camp events (reunions, etc.)	Large shelter facilities for large group picnics and other events.
Improve/stabilize shoreline, create beach features to extent feasible	same
Park trail system and wooded natural area	same

1.3.10 Preliminary Opinion of Probable Construction Costs

A preliminary opinion of probable construction costs for the proposed improvements was developed based on the concept plans. Construction costs for various project elements were obtained from several sources including contractor and vendor input, and RSMeans Building Construction Cost Data, 67th Annual Edition, 2009. At the conceptual master plan stage, detailed layout and design of various project elements have not been developed, therefore a comprehensive cost estimate is not possible. At this time, probable construction costs, including a 2-year escalation at 3% and a 15% contingency for the primary program elements are as follows:

JBC	\$15,100,000
JYB	\$27,600,000
CRP	\$9,600,000

A complete summary of the probable construction costs is contained in Appendix C.

The following chapters of this report, Chapters 2, 3 and 4, respectively address JBC, JYB and CRP.